Air Quality Permitting
Statement of Basis

July 19, 2006

Tier I Operating Permit No. T1-060110

Potlatch Forest Products Corp.
Post Falls Particleboard Plant

Facility ID No. 055-00018

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PUBLIC COMMENT DRAFT

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Acronyms, Units, and Chemical Nomenclature

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Idaho Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
hp	horsepower
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O&M Manual	Operations and Maintenance Manual
PCWP	plywood and composite wood products
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
SIC	Standard Industrial Classification
SO_2	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this draft Tier I operating permit in accordance with IDAPA 58.01.01.362.

The Department of Environmental Quality (DEQ) has reviewed the information provided by the Potlatch Forest Products Corp. (Potlatch) regarding the operation of its facility located in Post Falls, Idaho. This information was submitted based on the requirements to submit a Tier I operating permit application in accordance with IDAPA 58.01.01.301.

2. FACILITY DESCRIPTION

The following description was taken directly from the staff analysis for Tier I Operating Permit No. T1-050105, dated January 4, 2006.

The Potlatch Post Falls facility manufactures particleboard from wood shavings and resin. Trucks deliver and dump wood shavings in one of two storage buildings. A drag chain feeds the wood shaving to milling machines, which process the wood shavings into furnish. The furnish is dried in a rotary dryer and temporarily stored the outside dry silo. Furnish from the outside dry silo and sanderdust is then passed through a weigh system to either the No. 1 small blender and main blender, or the No. 2 small blender. In the blenders, resin is mixed with the sanderdust and furnish. The mix is conveyed to a former where the mix takes the shape of a mat approximately the size of a 4'X8' particleboard panel. The mats are pressed by the particleboard press, allowed to cool, cut to size, and sanded. Scrap from the saw line is processed back into furnish. Sanderdust generated by the process is stored, used for the manufacturing process or as fuel for the facility's Kipper and Sons boiler, or sold. The Kipper and Sons boiler provides steam heat for the process and plant make-up air.

3. FACILITY/AREA CLASSIFICATION

Potlatch's Post Falls facility is defined as a major facility in accordance with IDAPA 58.01.01.008.10 for Tier I permitting purposes because the facility has the potential to emit (PTE) nitrogen oxides (NOx) and volatile organic compounds (VOCs) at over 100 tons per year (T/yr). The facility is not a Prevention of Significant Deterioration (PSD) major source because emissions do not exceed the PSD threshold of 250 T/yr. The AIRS classification is "A" because potential emissions of NOx and VOC are greater than 100 T/yr.

The facility is located within Air Quality Control Region (AQCR) 62 and Universal Transverse Mercator (UTM) Zone 11. The facility is located in Kootenai County which is designated as unclassifiable for all criteria pollutants.

The Aerometric Information Retrieval System (AIRS) information provided in Appendix A defines the classification for each regulated air pollutant at Potlatch, Post Falls. This required information is entered into the U.S. Environmental Protection Agency (EPA) AIRs database.

4. APPLICATION SCOPE

This project is largely a renewal of the facility's existing Tier I permit, although it does involve an administrative change to the permittee's name. The existing permit lists the Potlatch Corporation as the permittee; however, the Post Falls facility was transferred to the Potlatch Forest Products Corporation, effective on December 30, 2005.

5. SUMMARY OF EVENTS

February 23, 2006	DEQ received the Tier I permit renewal application from Potlatch.
May 18, 2006	DEQ issued a completeness notification for the permit application.
May 31, 2006	DEQ issued a draft permit for the facility review period.
June 7, 2006	Potlatch commented on the draft permit, via email.
June 30, 2006	DEQ developed a draft permit for a 30-day public comment period.
July 19, 2006	DEQ finalized the draft permit for the public comment period.

6. PERMITTING HISTORY

The following is a chronological history of air quality permits issued to this facility.

- Tier I Operating Permit No. T1-050105, issued January 4, 2006
- Permit to Construct (PTC) No. P-050104, issued September 23, 2005
- Tier I Operating Permit No. 055-00018, issued December 10, 2002
- PTC No. P-010101, issued August 17, 2001
- PTC No. 0860-0018, issued February 1, 1985
- PTC, letter issued November 25, 1980
- PTC, letter issued January 10, 1974.

It should be noted that PTC No. P-050104 replaced the terms and conditions of the other preceding PTCs, and is the only PTC in effect at the present time. Similarly, Tier I Operating Permit T1-050105 was an amendment of the facility's initial Tier I permit (i.e., Tier I Operating Permit No. 055-00018), and replaced the terms and conditions of the initial Tier I permit.

7. PERMIT ANALYSIS

7.1 Basis of Analysis

The following documents were relied upon in preparing this memorandum and the Tier I operating permit:

- Tier I Operating Permit No. T1-050105, issued January 4, 2006
- Permit to Construct (PTC) No. P-050104, issued September 23, 2005
- Tier I operating permit renewal application, received February 23, 2006
- Compliance certification, received February 23, 2006
- Guidance developed by the U.S. Environmental Protection Agency (EPA) and DEQ

7.2 Emissions Description and Emissions Inventory

Table 7.1 lists regulated emissions sources and associated control equipment for the Post Falls Particleboard Plant. The table also lists the section of the renewal permit containing each source. Insignificant activities are not contained in Table 7, but are listed in Section 10 of this document.

Table 7.1 Regulated Emissions Sources and Control Equipment

Permit Section	Source Description	Emissions Control(s)
3	Sanderdust boiler	Multiclone and electrostatic precipitator
4	Temporary boiler	None
5	Outside dry silo (High-pressure air system No. 5) PF-BH-4	Baghouse
5	Particle dryer and cyclone PF-PD-1	Multiclone
5	Drag chain	Drag chain baghouse BH-1
5	Rotex screens No. 1, No. 2; Hammermills	Hammermill cyclone baghouse BH-3A
5	Blender, Former	Scalper air system baghouse BH-5, Outside silo high pressure air system baghouse BH-5A
5	Board cooler, Process fugitives, Rip and trim saws	East sawline baghouse BH-10A, West sawline baghouse BH-10
5	Board trim hog	Reclaim baghouse BH-3
5	Sanderdust storage silo	Sanderdust storage silo baghouse BH-6
5	Sander	Sander air system baghouse BH-7
5	Boiler fuel overs	Sanderdust overs baghouse
5	Particleboard press PF-PV-1	None; 3 vents
5	Drag chain (Air conveyance system No. 1)	Baghouse
5	Rotex screens No. 1, No. 2; Flaker; Hammemills (Air system No. 2)	Baghouse
5	Blender, Former (Scalper air system No. 7)	Baghouse
5	Board cooler, Process fugitives, Rip and trim saws (Air system No. 9)	Baghouse
5	Board trim hog	Baghouse
5	Sanderdust storage silo (Air system No. 12)	Baghouse
5	Sander (Air system No. 10)	Baghouse
5	Boiler fuel overs	Baghouse
5	North and South raw material storage buildings	None
6	Fire pump engine	None

An emissions inventory has not been reproduced within this document; however, Appendix D of Potlatch's Tier I permit renewal application, dated February 2006, contains a facility-wide emissions inventory for the sources listed in Table 7.1.

8. REGULATORY ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this operating permit.

8.1 IDAPA 58.01.01.369 – Tier I Operating Permit Renewal

This permitting action is a Tier I permit renewal, and is subject to the provisions of IDAPA 58.01.01.369. The existing permit is set to expire on August 28, 2006, and will be replaced by the renewal permit upon final issuance.

8.2 New Source Performance Standards (NSPS) – 40 CFR 60

The temporary boiler is subject to 40 CFR Part 60, Subpart Dc if constructed after June 9, 1989, and the maximum heat input capacity is between 10 and 100 million Btu/hr. If the first use of the temporary boiler is at the Potlatch facility, the initial notification requirements of §60.48c(a) are applicable. The only other applicable requirement for a natural gas- or propane-fired boiler is the fuel consumption recordkeeping of 60.48c(g). These NSPS requirements appear in Section 4 of the renewal permit.

8.3 National Emission Standards for Hazardous Air Pollutants (NESHAPS) – 40 CFR Parts 61 & 63

The following regulatory assessments were taken directly from the staff analysis for Tier I Operating Permit No. T1-050105, dated January 4, 2006.

8.3.1 40 CFR 63, Subpart DDDD

This subpart establishes compliance options, operating requirements, and work practice requirements for hazardous air pollutants (HAP) emitted from plywood and composite wood products (PCWP) manufacturing facilities that are a major source of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the compliance options, operating requirements, and work practice requirements for PCWP facilities that are a major source of HAP emissions. The requirements of this subpart do not apply to this facility because the facility-wide HAP emissions of the facility have been limited to below major source thresholds.

8.3.2 40 CFR 63, Subpart DDDDD

This subpart establishes emission limits and work practice standards for HAPs emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards. The requirements of this subpart do not apply to this facility because the facility-wide HAP emissions of the facility have been limited to below major source thresholds.

8.4 Compliance Assurance Monitoring – 40 CFR 64

The following excerpt is taken from EPA's *Technical Guidance Document: Compliance Assurance Monitoring* (Midwest Research Institute [MRI] for the Office of Air Quality Planning and Standards, U.S. EPA, MRI Project No. 4701-05, August 1998):

> "*Compliance assurance monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on pollution control device equipment to achieve compliance. Monitoring is conducted to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected.*"

Applicability criteria evaluation for each emissions unit is as follows:

- Unit is located at major source that is required to obtain Title V permit [40 CFR 64.2(a)];
- Unit is subject to emission limitation or standard for the applicable pollutant [40 CFR 64.2(a)(1)];
- Unit uses a control device to achieve compliance with the applicable emission limitation or standard [40 CFR 64.2(a)(2)];
- Potential precontrol emissions of applicable pollutant from unit are at least 100 percent of major source amount [40 CFR 64.2(a)(3)];
- Unit is not otherwise exempt under Section 64.2(b) [40 CFR 64.2(a)-(b)].

As discussed in Section 4.1.6 of Potlatch's 2006 Tier I permit application, there are nine specific units at the Post Falls facility that meet the CAM applicability criteria (i.e., refer to Section 4.1.6 of the Tier I permit application for specific details of applicability analyses conducted for each emissions source at the facility). The applicable pollutant for each of the nine affected units is PM_{10}. Table 8.1 lists the CAM-affected sources at this facility.

Table 8.1 Summary List of CAM-Affected Units and Control Equipment

CAM-Affected Source	Emissions Control(s)
Outside dry silo (High-pressure air system No. 5) PF-BH-4	Outside silo high pressure air system baghouse BH-5A
Drag chain	Drag chain baghouse BH-1
Rotex screens No. 1, No. 2; Hammermills	Hammermill cyclone baghouse BH-3A
Blender, Former	Scalper air system baghouse BH-5
Board cooler, Process fugitives, Rip and trim saws	East sawline baghouse BH-10A, West sawline baghouse BH-10
Board trim hog	Reclaim baghouse BH-3
Sanderdust storage silo	Sanderdust storage silo baghouse BH-6
Sander	Sander air system baghouse BH-7

Owners or operators of affected facilities are required to submit information about the monitoring approach to be used to comply with the CAM Rule. This information (i.e., the monitoring approach submittal) is referred to as a CAM submittal. Appendix G of Potlatch's 2006 Tier I permit application contains the facility's CAM submittal, and provides a monitoring approach proposal for the control device(s) for each CAM-affected unit (i.e., each baghouse listed in Table 8.1) with control device conditions that are to be maintained or monitored to comply with the CAM general criteria.

The required information for each unit in the CAM submittal is:

- Information on indicators, indicator ranges or process by which indicators are to be established, and performance criteria [40 CFR 64.4(a)];
- Justification for the proposed elements of the monitoring [40 CFR 64.4(b)];
- Control device operating data recorded during performance test, supplemented by engineering assessments or manufacturer's recommendations to justify the proposed indicator range [40 CFR 64.4(c)];
- Test plan and schedule for obtaining data, if performance test data are not available [40 CFR 64.4(d)];
- Implementation plan, if monitoring requires installation, testing, or other activities prior to implementation [40 CFR 64.4(e)].

In Appendix G of the 2006 Tier I permit application, Potlatch has proposed a specific CAM Plan for each of the baghouses listed in Table 8.1. Each of these plans proposes to use existing monitoring requirements within the Tier I operating permit to meet the requirements of the CAM Rule. Essentially, continued monitoring of the differential pressure drop across each baghouse with respect to manufacturer's recommendations and operations and maintenance (O&M) manual specifications, as well as continued visible emissions monitoring, will be used to comply with the CAM Rule.

Each of the baghouses on the CAM-affected units at this facility is contained in Section 5 of the Tier I permit, and the permit conditions which satisfy CAM Rule requirements are denoted as such in the footnote citations. Additionally, Table 8.2 contains a specific list of CAM Rule requirements to be addressed within the Tier I permit, along with the specific, corresponding Tier I permit condition that is intended to satisfy the CAM Rule requirement.

Table 8.2 Summary List of Tier I Permit Conditions Relative to CAM Requirements

Subpart 64 Citation	CAM Requirements for Tier I Permit	Tier I Permit Requirement	Tier I Permit Condition(s)
40 CFR 64.6(c)(1)	Indicators to be monitored	1) Visible Emissions 2) Baghouse Pressure Differential	5.3, 5.5
	Method of measuring the indicators	1) Inspections 2) Meter readings	5.9, 5.10
	Performance criteria for assessing indictors	Manufacturer's recommendations and O&M Manual	5.5, 5.6
40 CFR 64.6(c)(2)	Means for defining exceedances or excursions	Manufacturer's recommendations and O&M Manual	5.5, 5.6
	Level which constitutes an exceedance or excursion, or the means by which that level will be defined	Any exceedance of manufacturer's recommendations and O&M Manual	5.5, 5.6
	Averaging period associated with exceedances or excursions	Instantaneous / standard applies to any exceedance	n/a
	Procedures for notifying DEQ of the establishment or reestablishment of any exceedance or excursion level	1) Annual and semi-annual reporting requirements 2) Updated O&M Manual requirements	2.13, 5.6
40 CFR 64.6(c)(3)	The obligation to conduct monitoring and satisfy the requirements of 40 CFR 64.7 through 64.9	Contained in monitoring requirements of Tier I permit	5.3, 5.5, 5.9, 5.10
40 CFR 64.6(c)(4)	If appropriate, the minimum data availability requirement for valid data collection for each averaging period	Not necessary for this permit	N/A
	If appropriate, the minimum data availability requirement for the averaging periods in a reporting period	Not necessary for this permit	N/A

It should be noted that, as the CAM plans are implemented, Potlatch should periodically review the monitoring data to determine the need for additional measures to assure compliance with the applicable emission standards or limits. If an excursion or exceedance is detected, Potlatch must take the corrective actions necessary to return the emissions unit and control system to normal operation and minimize the likelihood that similar excursions or exceedances recur. If Potlatch determines that deviations occurred that the monitoring did not indicate as an excursion or exceedance, or if the results of a subsequent compliance test indicate that the indicator ranges must be modified, 40 CFR 64.7(e) requires Potlatch to notify DEQ promptly. If a permit revision is required, Potlatch must identify proposed revisions to the CAM submittal and submit the proposed revisions to DEQ for review and approval prior to implementing the revised plan.

After reviewing the report of excursions or exceedances, subsequent corrective actions taken, monitoring data, and other relevant information, DEQ may require the source to develop and implement a quality improvement plan (QIP). If a QIP is required, Potlatch must develop and implement the QIP as quickly as possible and must notify DEQ if more than 180 days will be required for completing the improvements specified. If it is determined that a QIP is inadequate, DEQ may require the source to modify the QIP.

9. PERMIT ANALYSIS

The only significant change made to the facility's existing Tier I permit is a change to the permittee's name. The existing permit listed the Potlatch Corporation as the permittee; however, the Post Falls facility was transferred to the Potlatch Forest Products Corporation, effective on December 30, 2005. Consequently, the renewal permit lists the Potlatch Forest Products Corporation as the permittee.

The only other change made to the renewal permit is the inclusion of two new insignificant sources in Section 7 of the permit. Appendix E of Potlatch's 2006 Tier I permit renewal application lists two 10,000-gallon ISO resin tanks as insignificant per IDAPA 58.01.01.317.01.b.i.(20). These two sources have been identified as insignificant sources within the renewal permit.

All other terms and conditions of the renewal permit reflect the same terms and conditions as were contained in Tier I Operating Permit No. T1-050105, dated January 4, 2006. Tier I Operating Permit No. T1-050105 is the previous version of the facility's Tier I permit, and is an amended version of the facility's initial Tier I operating permit (i.e., Tier I Operating Permit No. 055-00018, issued on August 28, 2002). Refer to the statements of basis for these prior Tier I permits for a discussion of the bases for terms and conditions contained in the renewal permit.

10. INSIGNIFICANT ACTIVITIES

The following activities and emission units are listed in Section 7 of the Tier I operating permit as insignificant activities under IDAPA 58.01.01.317.01.b.i.

Table 10.1 INSIGNIFICANT ACTIVITIES

Emissions Unit	Description	IDAPA Section 317.01.b.i.
PF-ME-102	3,000 gallon diesel fuel tank	(3)
PF-ME-110	One 250-gallon motor oil tank	(1)
PF-ME-111	One 200-gallon tank ammonium sulfate solution	(19)
PF-ME-112	Diesel fuel pump	(2)
PF-ME-114	Maintenance shop welding	(9)
PF-ME-122	275-gallon diesel fuel tank for emergency fire pump diesel engine	(3)
PF-ME-123	15,000-gallon urea resin tank	(20)
PF-ME-124	15,000-gallon urea resin tank	(20)
PF-ME-125	15,000-gallon urea resin tank	(20)
PF-ME-126	Welding vents in the maintenance shop	(9)
PF-ME-127	6,000-gallon urea resin tank	(20)
PF-ME-128	10,000-gallon ISO resin tank	(20)
PF-ME-129	10,000-gallon ISO resin tank	(20)

11. ALTERNATIVE OPERATING SCENARIOS

The facility did not request any alternative operating scenarios.

12. TRADING SCENARIOS

The facility did not request any trading scenarios.

13. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees in accordance with IDAPA 58.01.01.387 apply. The facility is in compliance with registration and registration fee requirements.

14. PERMIT REVIEW

14.1 Regional Review of Draft Permit

DEQ issued a copy of the draft permit to its Coeur d'Alene Regional Office on May 31, 2006. The regional office did not have comments regarding the draft permit.

14.2 Facility Review of Draft Permit

DEQ issued a draft permit to Potlatch for its review on May 31, 2006. The facility provided written comments on the draft permit on June 7, 2006; these comments were incorporated into the permit prior to providing the permit for public comment.

15. RECOMMENDATION

Based on the Tier I operating permit application and review of state rules and federal regulation, staff recommends that DEQ provide draft Tier I Operating Permit No. T1-060110 for public comment as required by IDAPA 58.01.01.364. This permit renews the facility's existing Tier I operating permit. The project does not involve PSD permitting requirements.

SO/bf Permit No. T1-060110

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Appendix A

Potlatch Forest Products Corp.
Post Falls Particleboard Plant
Facility ID No. 055-00018

Tier I Operating Permit No. T1-060110

AIRS Data Entry Form

AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM / POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO_2	A						U
NO_x	A					A	U
CO	B						U
PM_{10}	B		B				U
PT (Particulate)	B						U
VOC	A					A	U
THAP (Total HAPs)	B						U
			APPLICABLE SUBPART				
			DC				

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

NA = Not applicable as defined in IDAPA 58.01.01.579, constructed prior to baseline dates.